

DOCKET NO. 2010-376-E

PROPOSED ORDER OF
THE SOUTH CAROLINA
OFFICE OF REGULATORY STAFF

I. INTRODUCTION

This matter comes before the Public Service Commission of South Carolina (the “Commission”) on the request of South Carolina Electric & Gas Company (“SCE&G” or the “Company”) for an order approving an updated revised capital cost schedule for the construction of two 1,117 net megawatt nuclear power units that SCE&G is building at the site of the V.C. Summer Nuclear Station near Jenkinsville, South Carolina (the “Units”). SCE&G filed the request in this docket (the “Request”) on November 15, 2010 pursuant to the provisions of the Base Load Review Act (the “BLRA”), specifically S.C. Code Ann. § 58-33-270(E) (Supp. 2009) and in response to the opinion of the South Carolina Supreme Court in South Carolina Energy Users Comm. v. South Carolina Pub. Serv. Comm’n, 388 S.C. 486, 697 S.E.2d 587 (2010) (the “Opinion”).

A utility “may petition the Commission . . . for an order modifying any of the schedules, estimates, findings, class allocation factors, rate designs, or conditions that form part of any base load review order.” S.C. Code Ann. § 58-33-270(E). Further, the statute provides that the Commission shall grant the relief requested if, after a hearing, the Commission finds that the

evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility.

In South Carolina Energy Users Comm., 697 S.E.2d 587, the Court ruled that projected contingency costs of \$438 million which had not been itemized or designated to specific cost categories were not permitted as a part of the approved capital cost schedules approved in Commission Orders No. 2009-104(A) and No. 2010-12. Approximately \$438 million in owner's contingency funds has been removed in compliance with the Court's Opinion.

SCE&G seeks an additional \$174 million in capital costs for the construction of the Units. The increases in capital costs are for the following items: Owner's Cost of \$145 Million; Engineering, Procurement, and Construction Agreement ("EPC") Change Orders and non-EPC costs of \$16 million; and Transmission costs of \$13 million.

The Commission initially approved a capital cost schedule for the Units in Order No. 2009-104(A) (the "BLRA Order") which was issued on March 2, 2009. In the BLRA Order, the Commission approved a schedule of anticipated capital costs for the Units which reflected the annual forecasted construction cash flow for the project. That cash flow was provided in Exhibit F to the Combined Application ("Exhibit F") in that docket which was later replaced by Exhibit 2 of Order No. 2010-12 .

In the present proceeding, SCE&G seeks approval of an updated capital cost schedule entered into the record of this proceeding as Hearing Exhibit No. 6 (CLW-1-C) – Public Version.

As required by S.C. Code Ann. § 58-33-270(E), SCE&G provided notice of the filing in this docket to the South Carolina Office of Regulatory Staff ("ORS"). On November 30, 2010, the Commission's Docketing Department instructed the Company to publish by January 17, 2011 a Notice of Filing and Hearing in newspapers in general circulation in the area where it

serves retail electric customers and to provide a copy of that notice to these customers by U.S. mail. On January 21, 2011, the Company filed affidavits with the Commission demonstrating that the notice was duly published and mailed in accordance with the Docketing Department's instructions.

Timely petitions to intervene in this docket were received from South Carolina Energy Users Committee ("SCEUC") and CMC Steel South Carolina ("CMC"). ORS is a party to the proceedings in this docket pursuant to S.C. Code Ann. § 58-4-10 (Supp. 2010). No other parties sought to intervene in this proceeding.

The Commission convened a hearing on this matter on April 4, 2011 with the Honorable, John E. "Butch" Howard Chairman, presiding, and assisted by David Butler, Esq., Senior Counsel. SCE&G was represented by K. Chad Burgess, Esq., Matthew Gissendanner, Esq., Mitchell Willoughby, Esq., and Belton T. Zeigler, Esq. ORS was represented by Nanette S. Edwards, Esq., and Jeffrey M. Nelson, Esq. SCEUC was represented by Scott Elliott, Esq. Damon E. Xenopolous, Esq., for CMC advised the Commission prior to hearing that he would not be in attendance.

In support of the Request, the Company presented the direct testimony of Kevin Marsh, President of SCANA Corporation and SCE&G; Stephen A. Byrne, Chief Operating Officer and Executive Vice President for Generation and Transmission of SCE&G; and Carlette L. Walker, Vice President for Nuclear Finance Administration. ORS presented the direct testimony of M. Anthony James, P.E., Associate Program Manager, Electric Department, and Mark W. Crisp, P.E., Managing Consultant of C. H. Guernsey and Company. No witnesses testified on behalf of SCEUC or CMC.

Under the BLRA, in cases where a settlement agreement has been entered into between ORS and the utility, the Commission is authorized to “accept the settlement agreement as disposing of the matter, and [to] issue an order adopting its terms, if it determines that the terms of the settlement agreement comport with the terms of this act.” S.C. Code Ann. § 58-33-270(G). Prior to the hearing in this matter, SCE&G and ORS entered into a Settlement Agreement in which the parties agreed that the relief requested by SCE&G was reasonable and should be granted. As part of the Settlement Agreement, SCE&G and ORS agreed that the Units are being constructed in accordance with the construction schedules and cumulative cost forecasts and other terms as approved in Commission Order Nos. 2009-104(A) and 2010-12 and that as of December 31, 2010, the project was on budget and SCE&G had spent approximately \$861 million in capital, not including allowance for funds used during construction (“AFUDC”).

ORS agreed that the changes SCE&G sought in the capital cost schedule for the Units “are the result of refining and improving the timing and sequence of construction activities [related to the Units] and are not the result of imprudence by SCE&G.” Settlement Agreement ¶ 3(G), page 6. The Settlement Agreement was admitted into the record of the April 4, 2011 hearing as Hearing Exhibit 1.

II. DISCUSSION

For the reasons set forth below, the Commission finds that the Settlement Agreement comports with the terms of the BLRA and should be adopted. Specifically, the proposed changes are due in part to the Opinion issued by the Supreme Court and are due in part to the identification of additional capital costs by SCE&G. The facts and evidence of record supporting this conclusion are as follows:

SCE&G Witness Walker sponsored the updated capital cost schedule proposing three adjustments: (1) removal of \$438 million consistent with the Opinion of the South Carolina Supreme Court; (2) request for an additional \$174 million in capital costs that have been identified to specific cost categories; and (3) updated cash flow projections to reflect all timing changes related to the schedule for incurring capital costs including cash flow timing changes and changes in forecasted construction schedules and milestone completion dates. (Tr. 221-222)

a. Removal of Contingency Dollars

The SCEUC filed an appeal with the South Carolina Supreme Court contesting the legality of a contingency fund. The Court in South Carolina Energy Users Comm., 697 S.E.2d 587 ruled in favor of SCEUC, and as a result, SCE&G has removed \$438 million in contingency funds. In addition, included in the cash flow projection was contingency escalation of \$217 million which has also been removed. (Tr. 280, ll. 1-5)

ORS Witness Crisp testified that ORS reviewed the Company's filing and information supplied by the Company and determined that the Company has removed all dollars characterized as contingency and contingency escalation totaling \$655 million. (Tr. 337-338)

The Commission finds that the removal of contingency and contingency escalation is consistent with the Court's Opinion.

b. Increase in capital costs of \$174 million

The Company seeks an increase in capital costs of \$173,949,000. Late-Filed Hearing Exhibit No. 7 identifies the escalation impact associated with the additional capital costs of approximately \$174 million over the course of the project. The escalation impact associated with the change in total base project cost is \$3,683,000 resulting in a total escalated change in project costs of \$177,632,000.

Company Witness Marsh explained that before the Court's ruling, these additional capital costs would have been accounted for using part of the \$438 million owner's contingency fund. (Tr. 20) As part of the removal of the contingency dollars, the Company identified and itemized \$174 million in additional costs to specific cost categories. (Tr. 20) The capital cost schedules that were presented to the Commission in Docket No. 2008-196-E were based on the schedules agreed to in the EPC contract and based on forecasts of Owner's Costs and Transmission Costs and included a forecast of owner's contingency for the project. (Tr. 19-20) The largest increase in capital costs is due to increases in the Owner's Cost category of \$145 million. EPC Change Orders and Non-EPC cost increases amount to approximately \$16 million, and additional work to the Unit 1 switchyard increases Transmission Costs by approximately \$13 million, net other changes in the transmission budget. (Tr. 336, 339)

Owner's Cost Category

Witness Walker explained that the changes in Owner's Costs forecasts were identified as a result of preparing detailed budgets by cost center and resource code for the nine remaining years of the New Nuclear Deployment ("NND") project. (Tr. 234-235) At hearing, she noted that at the point in time when the Company was negotiating the EPC contract, it would not have been practical to canvass every department within SCANA to obtain input into the level of support necessary for the EPC Contract. (Tr. 297) Instead the Company prepared a high-level estimate of its Owner's costs and then with a larger team the Company was able to identify the assets and labor required to meet specific functions. (Tr. 298) She also explained that the Company had confidence in the high-level forecast at the time it was submitted to the Commission for approval because of the \$438 million in contingency funds. (Tr. 296)

Of the twelve cost categories that comprise the Owner's cost forecast, the single largest of the increases is for "Onsite Training & Startup/SCE&G Labor" which is integral to ensuring that the plants will be operated and maintained safely and efficiently. (Tr. 246, 338) The Company seeks an additional \$64 million for Onsite Training & Startup/SCE&G Labor. (Tr. 246) During cross-examination, Counsel for SCEUC questioned whether the Company should have previously identified these additional training, start-up, and labor costs. Witness Walker responded that this cost category includes more than just training and startup. This cost category includes SCE&G labor, and SCE&G now realizes that the fatigue rule applies to a construction facility and the application of that rule has a significant impact on the level of labor necessary for security during construction. (Tr. 299-300) The Company also recognized that it would need to start specialized training of operational personnel earlier than planned which required employees to attend training courses at a Westinghouse facility rather than on-site at V.C. Summer (Tr. 338) Additionally, the Company determined that the number of people required to provide oversight for construction and to operate the Units had to be increased and the cost of recruiting, hiring, training, and employing the personnel was higher than anticipated. (Tr. 209-210; 248)

The second largest increase in the Owner's Cost forecast is in the cost category of "General & Administrative." The Company seeks roughly a \$53 million increase in this cost category. These costs represent the direct support provided to the NND team from non-NND cost centers within SCE&G and SCANA. (Tr. 252-253) The complexity and resource requirements of the NND project are greater than that originally estimated increasing from \$22 million to approximately \$75 million. (Tr. 252-253; 301-302) Witness Walker explained that the original forecast for this cost category was based upon an estimated percentage of certain

owner's costs. (Tr. 302-303) When asked why a percentage was used, Witness Walker explained that the general population of SCANA would not have had enough insight into the deliverables in the 2006-2008 time frame to provide an estimate of the costs associated with supporting the NND project. (Tr. 304-305)

Chart C of Witness Walker's prefiled direct testimony identifies the remaining ten cost categories consisting of Insurance; Sales Tax; Licensing/Permits, and Nuclear Regulatory Commission ("NRC") Inspection Fees; Non-EPC Construction; Spare Parts; Plant Equipment, Tools, Maintenance Materials, Consumables, & Supplies; NuStart; Met Tower, Plant Site Layout, Pre-EPC Project Management; Real Estate/Property Taxes; and Electricity. (Tr. 246)

The Company re-examined its original estimates for its Owner's Cost forecast, identified additional costs including costs that cannot be shared with Santee Cooper, and determined that these increases are necessary. (Tr. 338-339) ORS Witness Crisp testified the cost increases associated with the Owner's Cost forecast are reasonable. (Tr. 339)

For the foregoing reasons, the Commission finds that the requested increases in Owner's Cost are reasonable and prudent. Nothing in the record demonstrates that these cost increases are the result of imprudence on the part of the Company.

Change Orders

The Company has negotiated or signed eleven (11) Change Orders under the EPC Contract. ORS Witness Crisp testified that these Change Orders have been incurred to improve construction and overall plant functionality. Of the eleven (11) Change Orders only six (6) of them (Change Orders 2, 3, and 7-10) reflect additional costs incurred to compensate Westinghouse/Shaw for work performed outside the original scope of the EPC Contract. These six Change Orders represent approximately \$12 million of the \$174 million. (Tr. 86)

The Company negotiated Change Order 2 to provide for delivery of two limited scope simulators to support initial reactor training activities. The full-scope simulators required by the EPC Contract will be provided at a later date. (Tr. 140) Change Order 3 involved the work necessary for upgrading Parr Road to accommodate heavy construction equipment; this work has been completed. (Tr. 140) Change Order 7 provides for additional engineering work necessary to accommodate carrier frequency relays at the Switchyard for the V.C. Summer – St. George 230kV transmission lines. In response to questioning from Commissioner Hamilton, Company Witness Byrne explained that the Company revisited the use of long fiber optic lines because of reliability concerns. (Tr. 204-205)

Change Order 8 originated from a discussion between the Consortium¹ and the Company to use one large crane versus two smaller cranes and satisfies a requirement under the EPC Contract to negotiate moving a further portion of the Target category to the Fixed or Firm Category. (Tr. 344-345) Change Order 8 provides for the shifting of \$315 million from the Target Cost Category to the Fixed or Firm Cost Category and also provides that the Consortium forego escalation on work scopes in exchange for a \$10 million risk compensation payment. (Tr. 344) In response to Chairman Howard's question as to the role of Santee Cooper in the negotiation of Change Order 8, Company Witness Marsh testified that the payment of \$10 million represents the Company's 55% share of the total \$18 million risk compensation payment and that Santee Cooper's senior management agreed to the proposal. (Tr. 59-60)

Company Witness Byrne explained that one of the benefits of Change Order 8 is that if the original estimate was "bad," the movement from the Target to the Fixed or Firm category puts the risk of additional costs such as labor, training, or equipment on the contractor. (Tr. 142-

¹ The Consortium consists of Westinghouse Electric Company and Stone & Webster, a part of the Shaw Group.

143) He also testified that the Company believes the risks avoided more than justify the value of the risk compensation payment. (Tr. 148) Using Handy-Whitman escalation rates, the Company avoided approximately \$8.6 million in escalation. (Tr. 228) ORS Witness Crisp also testified that, in light of these benefits and the future substantial reduction in risk to the Company, the \$10 million risk compensation payment is reasonable. (Tr. 340-341) The total conservative estimate for avoided costs as a result of the agreement is approximately \$20 million. (Tr. 340) He also explained that moving the \$315 million from the Target to Fixed or Firm category results in more than two-thirds (2/3) of the costs under the EPC Contract falling in the Fixed or Firm categories. (Tr. 344)

Chart B in Company Witness Byrne's testimony provides a listing of the scopes of work being shifted from Target to Fixed or Firm category under Change Order 8. (Tr. 95) One such scope of work is the Community Support/Outreach. (Hearing Exhibit 3, page 48) Consistent with the Company's letter filed with the Commission on April 25, 2011, SCE&G has committed to ORS that SCE&G will voluntarily agree not to include costs associated with this scope of work in future revised rates filings.

Change Order 9 arises from the Company's decision to construct the needed transmission lines on existing rights-of-way and reflects the cost of changing the Switchyard configuration to realign the receiving points such that the transmission lines do not cross. Crossing transmission lines create safety and reliability concerns. (Tr. 102-103) Change Order 10 provides the Company the ability to use Oracle's Primavera Project Planner software used by Westinghouse for scheduling and resource planning for the project. (Tr. 103-104) The cost includes the licenses for SCE&G's users, installation of the software on Westinghouse's server, and support and upgrade costs for the software and interface for seven years. (Tr. 103)

The Commission finds that the cost increases associated with Change Orders 2, 3 and 7-10 are reasonable and prudent based on the evidence of record. In light of the benefits associated with Change Order 8 and the future substantial reduction in risk, the risk compensation payment is prudent.

Non-EPC Cost Item

The Company originally projected that Santee-Cooper would pay 45% of the entire scope of work for the Units 2 and 3 Switchyard. (Tr. 233-234) However, certain costs included in this scope of work do not benefit the project in general but rather support construction of new transmission lines for SCE&G's transmission system. As a result, the Company has determined that certain amounts cannot be split with Santee Cooper and seeks an adjustment to the capital cost schedule in the amount of approximately \$5 million in non-split costs.² (Tr. 233-234; Hearing Exhibit 2 – MWC- 4; Hearing Exhibit 5 – CLW-3-C)

Transmission Costs

The Company also seeks a cost increase associated with Transmission projects necessary to support Units 2 and 3 that are not part of the EPC Contract or captured in Owner's cost. SCE&G has included an adjustment of \$13 million relating to the Unit 1 Switchyard redesign, net other changes in the transmission budget. The Company arrived at the \$13 million figure based on an updated assessment of the cost of certain transmission work that will need to be conducted in the Unit 1 Switchyard to accommodate placing power from Units 2 and 3 onto the

² Because a part of the Unit 1 Switchyard work benefits Unit 1 through the establishment of an alternative power feed, there is a \$352,000 reduction in the cost forecast. Taking the \$12 million in additional costs from the Change Orders and the \$5 million in non-split costs less the \$352,000 equates to \$16 million using rounded figures.

grid. Part of the cost is driven by the need to satisfy and comply with NRC safety standards which involve extensive engineering, testing, and documentation requirements. (Tr. 104-105)

We find based on the evidence in the record that the proposed cost increase associated with the Transmission project is reasonable and prudent. Nothing in the record demonstrates that the increase associated with the Transmission projects is the result of imprudence on the part of the Company.

c. Updated Cash Flow Projection

On a quarterly basis the Company adjusts its cash flow forecasts to account for all changes in the expected timing of construction costs, and the Company files a quarterly report with this Commission reflecting those changes. As milestone dates accelerate or decelerate so do the associated payments, the effect is that the net forecasted cash flow schedule shifts and as a result the amount of escalation realized on the project changes. (Hearing Exhibit No. 6 (CLW-1-C) – Public Version)

The Commission finds that the requested modification of the capital cost schedule for the Units lowers the approved cost for the project to \$4.3 billion in 2007 dollars, net of AFUDC and removal of contingency dollars, and is not the result of any imprudence on the part of SCE&G. Pursuant to S.C. Code Ann. § 58-33-270(E), the modified capital cost schedule is approved.

III. SETTLEMENT AGREEMENT

We find that the Settlement Agreement entered into the record as Hearing Exhibit 1 comports with the terms of the BLRA and should therefore be approved pursuant to the provisions of S.C. Code Ann. §58-33-270 (G) (Supp. 2010). We received testimony from ORS Witnesses Anthony James and Mark Crisp regarding ORS's oversight activities which focus on

the Company's adherence to the approved construction and capital cost schedules. Specifically ORS reviews the Company's quarterly reports and monitors the Company's progress in the BLRA milestone schedule; ORS makes regular on-site visits; ORS attends meetings with the Company, the Consortium, and routinely participates in public NRC meetings; ORS monitors the approved capital cost estimates to determine the status of the project budget; and ORS evaluates the Company's actual project expenditures. (Tr. 322-325) ORS issues a responsive report to the Company's quarterly reports. (Tr. 325)

IV. FINDINGS AND CONCLUSIONS

1. On March 2, 2009, the Commission issued a BLRA Order, Order No. 2009-104(A), in response to SCE&G's Combined Application in Docket No. 2008-196-E.

2. On January 21, 2010, the Commission issued an order approving updates and revisions to SCE&G's milestone and capital costs schedules, Order No. 2010-12, in Docket No. 2009-293-E.

3. The Company filed its request in this Docket on November 15, 2010, for an order approving a revised capital cost schedule.

4. In compliance with the Court's Opinion in South Carolina Energy Users Comm., 697 S.E.2d 587, \$438 million in contingency costs and \$217 million in contingency escalation costs totaling \$655 million have been removed.

5. SCE&G also seeks approval of a revised capital cost schedule incorporating an additional \$174 million in capital costs. Specifically, SCE&G seeks an increase in Owner's Cost of \$145 million; an increase in capital costs for EPC Change Orders and non-EPC costs totaling \$16 million; and an increase in Transmission costs of \$13 million.

6. We hereby adopt an approved capital cost for the Units to be \$4,270,404,000 in 2007 dollars, net of AFUDC, as derived from Hearing Exhibit 1, Exhibit 2 to the Settlement Agreement.

7. An electric utility may petition the Commission for an order modifying any of the schedules, estimates, findings, class allocation factors, rate designs, or conditions that form part of any base load review order issued under the BLRA and the Commission shall approve such modification if the evidence of record justifies a finding that the changes are not the result of imprudence on the part of the utility. S.C. Code Ann. § 58-33-270(E).

8. The Commission finds that the requested modifications to the approved capital cost schedule are reasonable and are not the result of any imprudence on the part of SCE&G. Consequently, pursuant to S.C. Code Ann. § 58-33-270(E), the Commission approves the updated capital cost schedule set forth in Hearing Exhibit No. 1 as Exhibit 2 - Confidential Version, and in Hearing Exhibit 6 (CLW-1-C) - Public Version and attached hereto as Order Exhibit No. 1, as the approved capital cost schedule for the Units going forward.

9. The Commission finds that the requested modifications do not alter the approved substantial completion dates for the Units of April 1, 2016 for Unit 2 and January 1, 2019 for Unit 3.

10. We find that the Settlement Agreement is in the public interest and is hereby approved.

11. The future quarterly reports filed by SCE&G under S.C. Code Ann. § 58-27-277 shall reflect the modified capital cost approved in this Order.

12. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

John E. "Butch" Howard, Chairman

ATTEST:

(SEAL) David A. Wright, Vice Chair

BEFORE
THE PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA
DOCKET NO. 2010-376-E

IN RE:	Petition of South Carolina Electric & Gas Company for Updates and Revisions to Schedules Related to the Construction of a Nuclear Base Load Generation Facility at Jenkinsville, South Carolina)))))	CERTIFICATE OF SERVICE
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This is to certify that I, Pamela J. McMullan, have this date served one (1) copy of the **PROPOSED ORDER** in the above-referenced matter to the person(s) named below by causing said copy to be deposited in the United States Postal Service, first class postage prepaid and affixed thereto, and addressed as shown below:

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A handwritten signature in black ink, appearing to read 'Pamela J. McMullan', is written over a horizontal line.

Pamela J. McMullan

April 25, 2011
Columbia, South Carolina